

**REMARKS/ARGUMENTS**

Applicants respectfully request reconsideration and allowance of this application in view of the amendments above and the following comments.

Claims 38-45 were objected to under 37 CFR § 1.75(c) as being of improper dependent form. In response, Applicants have made claims 27 and 38 independent.

Claims 21-45 were rejected under 35 USC § 112, second paragraph, as being indefinite. In response, with respect to the Examiner's point made in the paragraph bridging pages 3-4 of the Office Action, Applicants have limited to "hydrolyzing and condensing" without prejudice to pursuing the original language at a later time.

With respect to the Examiner's point made in the second paragraph on page 4 of the Office Action, Applicants do not intend any limitation to powders, and, therefore, the claims have not been so limited. Although the instant specification contains examples of the inventive colloids in the form of powders, these powders are easily stored, they are also stable, they can be easily shipped and, importantly, they can be re-dispersed in water with the formation of the original aqueous solution of the colloids. Thus, instant Example 13, for instance, shows the powdered colloid of Example 1 in the form of a re-dispersed *solution* in water. Respectfully, the invention is properly broadly claimed, and extends to the inventive colloids in any form, including, but not limited to, an original colloidal solution, a powdered form thereof, and any re-dispersed colloid.

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Amendment under 37 CFR § 1.111 filed on July 21, 2006

Claims 21, 23, 24, 26, 27, 29, 30, 32-37 and 37 were rejected under 35 USC § 102(b) as being anticipated by Moumen et al. ("Moumen"), *Chemical Materials*, 8: 1128-1134 (1996). In response, Applicants would remind the Examiner that anticipation requires that each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference, and, further, if the Examiner relies on a theory of inherency as to any particular element, then the extrinsic evidence must make clear that such element is *necessarily* present in the thing described in the reference, and the presence of such element therein would be so recognized by persons skilled in the art. *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Further, inherency is not established by probabilities or possibilities, and the mere fact that a property may result from a given circumstances is not sufficient; instead it must be shown that such property *necessarily* inheres in the thing described in the reference. *Id.* Moumen's colloids are not "[a]dditive-stabilized, 100% water-redispersible metal oxide colloids," as presently claimed. Moumen's colloids can only be stabilized if a large amount of an organic solvent, specifically 50% ethylene glycol, is used in addition to water. Consequently, Moumen's colloids cannot be stably redispersed in 100% water, and, therefore, Moumen cannot anticipate the instant claims.

Claims 21-24, 26-30, 32-35, 37-39 and 41 were rejected under 35 USC § 102(b) as being anticipated by Bonnemann et al. ("Bonnemann"), WO 96/17685. In response, Applicants submit that Bonnemann's colloids are not "[a]dditive-stabilized, 100% water-redispersible metal oxide colloids," as presently claimed. In Bonnemann's method, a transition metal salt, such as a metal chloride or metal nitrate, is reduced with a boron hydride or with H<sub>2</sub> in the presence of a stabilizer with the formation of metal colloids, *not* metal oxide colloids, as presently claimed.

There is no express teaching in Bonnemann of metal oxide colloids, as presently claimed. Accordingly, this rejection, in order to be proper, is dependent upon Bonnemann constituting an inherent anticipation of such metal oxide colloids. However, Applicants refer again to the *Robertson* decision: Inherency is not established by probabilities or possibilities, and the mere fact that a property may result from a given circumstances is not sufficient; instead it must be shown that such property *necessarily* inheres in the thing described in the reference. *Id.* According to the Examiner, “[i]t is reasonable to conclude that the oxide is inherent to the [Bonnemann] process. It is clear that said oxide is formed otherwise there would exist nothing to be reduced in the reduction step of streaming H<sub>2</sub> for 3 or 4 hours.” However, as noted above, it is the transition metal salt that is reduced by the streaming H<sub>2</sub>, and such reduction leads to the formation of metal colloids, not metal oxide colloids, as presently claimed. Consequently, Bonnemann does not anticipate the present claims, inherently or otherwise.

Claim 36 was rejected under 35 USC § 103(a) as being obvious over Mourmen. In response, Applicants point out that this rejection was premised on Mourmen anticipating the basic features of the present invention, which, as discussed above, is not, in fact, the case. Consequently, Applicants believe the Examiner would be fully justified to reconsider and withdraw this rejection as well.

Claim 44 was rejected under 35 USC § 103(a) as being obvious over Bonnemann in view of Day et al. (“Day”), US 4,197,187. In response, Applicants point out that this rejection was premised on Bonnemann anticipating the basic features of the present invention, which, as discussed above, is not, in fact, the case. Consequently, Applicants believe the Examiner would be fully justified to reconsider and withdraw this rejection as well.

Claims 21-24, 26-30, 32-35, 37-39 and 41 were rejected on the ground of obviousness-type double patenting as being unpatentable over claims 1-25 of US 6,090,746. In response, Applicants point out that this rejection was premised upon Bonnemann inherently producing metal oxide colloids, which, as discussed above, is not, in fact, the case. Consequently, Applicants believe the Examiner would be fully justified to reconsider and withdraw this rejection as well.

Applicants believe that the foregoing constitutes a bona fide response to all outstanding objections and rejections.

Applicants also believe that this application is in condition for immediate allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

Early and favorable action is earnestly solicited.

Respectfully submitted,  
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